- 1. Project Name: Rota SBH
- 2. Date of Inspection: September 18, 2004

#### 3. Inspection Personnel:

<u>Name</u>	Agency/Office	Telephone No.
Dan Meyers	COE	438-8875

### 3a. Non-Federal POC:

Ben Manglona	CPA (on Rota)	670-523-9497
		C 670-286-5882

## 4. Discussion:

The purpose of this inspection was to verify conditions as a result of Typhoon Chaba. The Revetted mole is approximately 535 LF. There has been major failure as a result of the typhoon which primarily impacted the revetted mole on the eastside (Harborside) of the structure caused by wave overtopping from the northwest. This damage is from approximately from Sta. 0+09 to Sta. 2+22, Harborside (HS). Minor damages noted on the oceanside of the project as well. Repairs are required to ensure the continuing functionality of the structure.

#### Prestorm Revetted Mole - 535 LF:



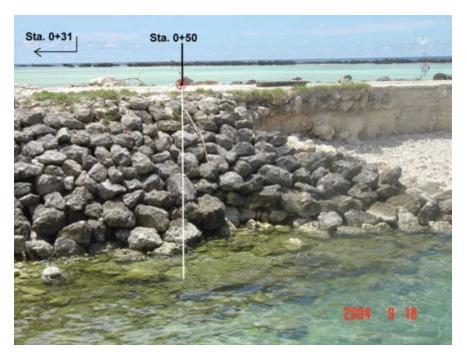
Storm Damage to Revetted Mole Harborside :



a. Sta. 0+00, HS, Overview of damages.



b. Sta. 0+09 to Sta. 0+30, HS, Erosion to existing sideslope, repairs required.



c. Sta. 0+50, HS, Beginning of major damages to the sideslope.



c. Sta. 0+85, HS, the depth of washout cut averages approximately 6 ft.



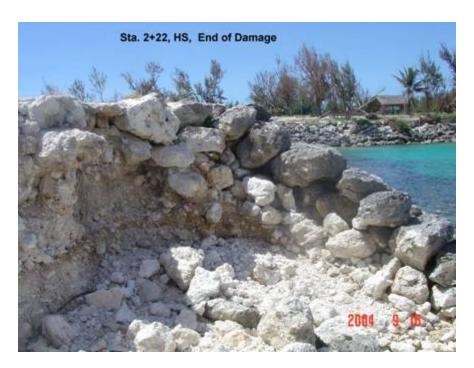
e. Sta. 1+38, HS, Same as Above.



f. Sta. 1+86, HS, 36" culverts are exposed however appear in good condition.



g. Sta. 2+22, HS, Sideslope failure averages 6 ft deep and approx. 25 ft from original toe stones into the revetted mole; splash apron damaged and culverts undermined approximately 2 ft.



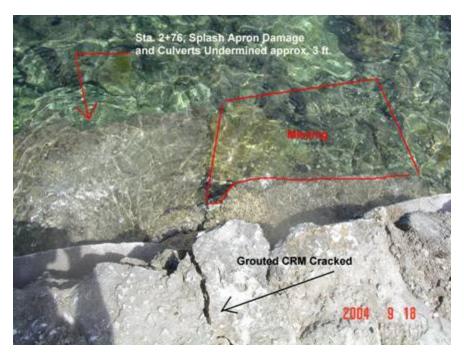
h. Sta. 2+22, HS, End of major failure.



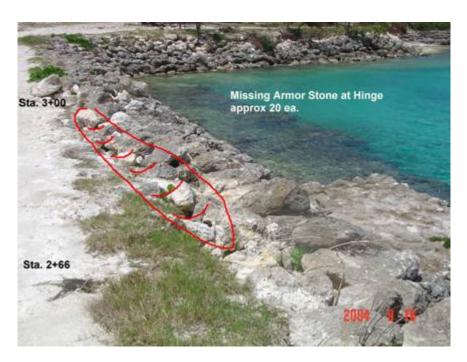
h. Sta. 2+33, HS, missing toe armor stone.



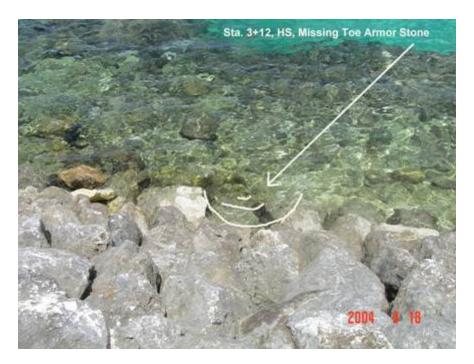
i. Sta. 2+52 to Sta. 2+59, HS, missing armor stones at the hinge of the sideslope.



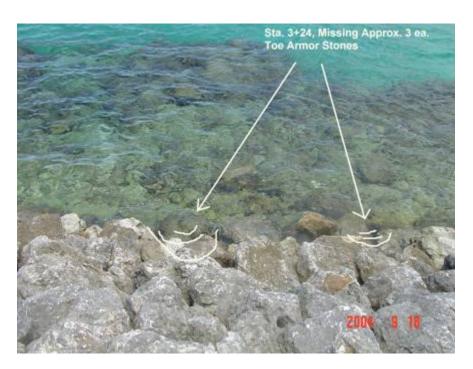
j. Sta. 2+76 HS, Splash apron damages and culverts undermined approx. 3 ft.



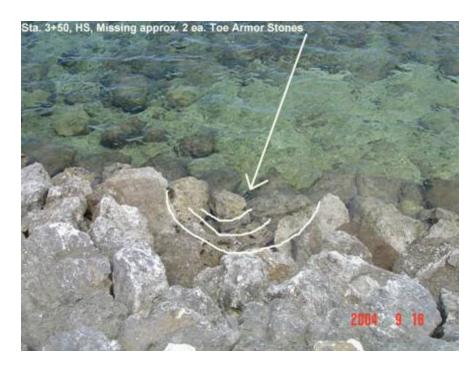
k. Sta. 2+66 to Sta. 3+00, HS, approximately 20 ea. missing armor stones from the hinge of the sideslope.



1. Sta. 3+12, HS, missing toe armor stone.



m. Sta. 3+24, approx. 3 ea. missing toe armor stones.



n. Sta. 3+50, HS, 2 ea. missing toe armor stones.



o. Sta. 3+51, HS, 1 ea. missing armor stone.



p. Sta. 3+55, missing armor stone approximately 4 ft up the sideslope from the toe.



q. Sta. 3+59 to Sta. 3+84, HS, approximately 20 ea. missing armor stone to the hinge if the sideslope.



u. Sta. 3+84, missing toe armor stone.

# Storm Damage to Revetted Mole Oceanside :



a. Sta. 0+40, OS,  $1^{\rm st}$  visible armor stones.



b. Sta. 0+56 to Sta. 1+34, OS, approximately 15 ea. flipped armor stones and approximately 30 ea. missing armor stones.



c. Sta. 1+34, OS, overview.



d. Sta. 1+60, OS, overview.



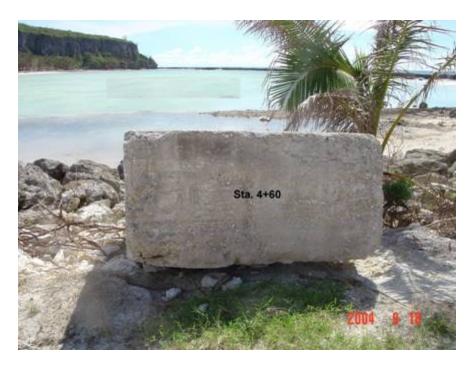
e. Sta. 1+60 to Sta. 2+37, OS, approximately 20 ea. flipped armor stones and approximately 20 ea. missing armor stones.



f. Sta. 2+37 to Sta. 4+83, OS, approximately 20 ea. flipped armor stones and approximately 15 ea. missing armor stones.



g. Sta. 4+83, OS, overview.



h. Sta. 4+60, OS, concrete block and coconut tree on structure.



i. Sta. 4+85 to Sta. 5+35, OS, tree roots and armor stones in poor contact at identified area.



j. Sta. 5+35, OS, overview photo.



k. Sta. 2+74, OS, trees in culverts.



1. Sta. 1+80, OS, tree and revetted mole (causeways surface rough) Photo is typical throughout.

#### 5. Notes:

Major damage was sustained at the Non-Federal portions of the harbor. Anjota island revetment, Dock # 1 and Dock # 2. Dredging may be required in the non-federal portion of the harbor adjacent to the boat ramp as federally owned material (the revetted mole) has been deposited there.

# 6. Findings/Conclusions:

Repairs should be programmed immediately as the project will not perform as designed and will deteriorate at an accelerated rate do to the exposed fill material.

Signed:				
	Dan	Marzara	CEDOH-EC-T	